

## ASSIGNMENT 4

Textbook Assignment: "General Aircraft Maintenance," chapter 3, pages 3-1 through 3-50.

4-1. The Navy's Tool Control Program is based on what concept?

1. Instant inventory
2. Cost effectiveness
3. Personal accountability
4. Tool replacement demands

4-2. Ensuring that tools are procured and issued in a controlled manner consistent with the approved tool control plan is the responsibility of what officer?

1. The maintenance officer
2. The material control officer
3. The quality assurance officer
4. The assistant maintenance officer

4-3. Which of the following reports should be used to report poor quality tools to FLEMATSUPPO?

1. EI
2. HMR
3. CAT I QDR
4. CAT II QDR

4-4. Upon task assignment, you must record the tool container number on what copy of the VIDS/MAF?

1. Copy 1
2. Copy 2
3. Copy 3
4. Copy 5

4-5. What person is responsible for training work center personnel in the use of a material safety data sheet (MSDS)?

1. The safety officer
2. The executive officer
3. The work center supervisor
4. The maintenance control Chief

4-6. To indicate a hazard that could result in injury or death to personnel if not carefully observed or followed, what safety term is used?

1. Memo
2. Note
3. Warning
4. Caution

IN ANSWERING QUESTIONS 4-7 AND 4-8, REFER TO FIGURE 3-3 IN THE TEXTBOOK.

4-7. Thin lines made up of long and short dashes alternately spaced and consistent in length are known by what name?

1. Hidden lines
2. Center lines
3. Dimension lines
4. Extension lines

4-8. Thin lines terminated with arrow heads at each end are known by what name?

1. Hidden lines
2. Leader lines
3. Extension lines
4. Dimension lines

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IN ANSWERING QUESTIONS 4-9 THROUGH 4-13, SELECT FROM COLUMN B THE TYPE OF DRAWING OR DIAGRAM APPROPRIATE FOR THE USE LISTED IN COLUMN A.

	<u>A. USES</u>	<u>B. TYPES</u>
4-9.	Shows an exploded view	1. Block diagram
4-10.	Illustrates a system	2. Schematic diagram
4-11.	Shows disassembly	3. Pictorial drawing
4-12.	Shows the sequence in which the different components operate	4. Orthographic drawing
4-13.	Shows detail of parts, components, and other objects; used primarily by the manufacturer	
4-14.	A graphic representation that shows how a component fits with other components of a system but does not tell where it is in the aircraft is known as what type of diagram or drawing?	1. Schematic diagram 2. Pictorial drawing 3. Installation diagram 4. Orthographic drawing

- 4-15. Efficient troubleshooting of an electrically controlled hydraulic system may require you to use a multimeter for which of the following reasons?
1. To check frequency
  2. To check voltage and continuity
  3. To relieve the AE of solving electrical problems
  4. To read the electrical portion of a schematic
- 4-16. After conducting a visual inspection and an operational check, what troubleshooting step should you perform next?
1. Locate the trouble
  2. Isolate the trouble
  3. Correct the trouble
  4. Classify the trouble
- 4-17. You are troubleshooting a malfunction and conducting the final operational check. What is the minimum number of times the affected system must be actuated?
1. Five
  2. Seven
  3. Three
  4. Four
- 4-18. When performing an operational check, which of the following actions should you complete before applying external hydraulic and electrical power?
1. Remove all safety locks
  2. Install all ground covers
  3. Return all flight controls to their neutral position
  4. Check all circuit breakers and electrical switches for proper position
- 4-19. Which of the following maintenance malpractice causes fatigue failure in fasteners?
1. Overtorquing
  2. Undertorquing
  3. Improper heat treatment
  4. Improper protective coating
- 4-20. You can find separate torque tables and torquing considerations in which of the following manuals?
1. NAVAIR 01-1A-8
  2. NAVAIR 01-1A-17
  3. NAVAIR 01-1A-500
  4. NAVAIR 01-1A-509
- 4-21. Lubricants are NOT used for which of the following purposes?
1. To cool metallic parts
  2. To protect metallic parts against wear
  3. To protect metallic parts against corrosion
  4. To increase friction when metal surfaces are in direct contact
- IN ANSWERING QUESTIONS 4-22 AND 4-23, REFER TO TABLE 3-5 IN THE TEXTBOOK.
- 4-22. What is the recommended temperature range for MIL-G-21164?
1. 32° to 200°F
  2. -65° to 160°F
  3. -65° to 350°F
  4. -100° to 250°F
- 4-23. To lubricate wheel bearings on internal brake assemblies, what type of grease should you use?
1. MIL-G-4343
  2. MIL-G-23827
  3. MIL-G-81322
  4. MIL-G-25013
- 4-24. What total number of common methods are used to apply lubricants?
1. One
  2. Two
  3. Three
  4. Four
- 4-25. Flush lubrication fittings are used for which of the following reasons?
1. To prevent interference with moving parts
  2. To reach areas that are normally easy to access
  3. To reach areas that are normally hard to access
  4. To lubricate areas that do not require much lubrication
- 4-26. To determine the type of lubricant and equipment to be used in a given area of an aircraft, you should refer to which of the following publications?
1. MIMs
  2. MRCs
  3. Either 1 or 2 above
  4. OPNAVINST 4790.2 (series)

- 4-27. To find the basic weight of an aircraft, you should refer to which of the following publications?
1. NAVAIR 01-1A-40
  2. NAVAIR 01-1B-40
  3. NAVAIR 01-1A-50
  4. NAVAIR 01-1B-50
- 4-28. What type of aircraft weighing equipment has become the standard used by the Navy?
1. The mobile electronic weighing system
  2. The heavy-duty portable scales
  3. The stationary pit-type scales
  4. The electronic load cells
- 4-29. Typically, a mobile electronic weighing system can be set up by two men in what minimum number of minutes?
1. 10 min
  2. 15 min
  3. 20 min
  4. 30 min
- 4-30. Heavy-duty portable scales must be calibrated at least how often?
1. Prior to use
  2. Once every 6 months
  3. Twice every 6 months
  4. Once every 12 months
- 4-31. Which of the following components is NOT normally a part of a weighing kit?
1. A plumb bob
  2. A chalk line
  3. A hydrometer
  4. A spirit level
- 4-32. Before using an electronic scale, you must warm it up for what minimum number of minutes?
1. 5 min
  2. 10 min
  3. 20 min
  4. 30 min
- 4-33. After removing an aircraft from the scales, you must reweigh it if the scale does NOT return to zero within what number of minutes?
1. 5 min
  2. 10 min
  3. 15 min
  4. 20 min
- 4-34. Which of the following is NOT a type of aircraft lifting sling?
1. Wire rope
  2. Snatch cable
  3. Fabric webbing
  4. Structural steel
- 4-35. What is the most common type of aircraft lifting sling?
1. Web sling
  2. Chain sling
  3. Wire rope sling
  4. Structural aluminum sling
- 4-36. Which of the following types of lifting slings do NOT contain flexible components?
1. Wire slings
  2. Chair slings
  3. Fabric slings
  4. Structural steel slings
- 4-37. To find load testing and inspection information on aircraft lifting slings, you should consult what publication?
1. NAVAIR 01-1A-17
  2. NAVAIR 01-1A-20
  3. NAVAIR 17-1-114
  4. NAVAIR 17-15E-52
- 4-38. When a lifting sling's capacity has been exceeded, which of the following actions should you take?
1. Forward it to AIMD for analysis and disposition
  2. Use it once more, and then forward it to AIMD
  3. Send it to the organizational unit for analysis and disposition
  4. Retain it until the next time it is required, and then forward it to AIMD for inspection
- 4-39. A group of wires twisted together is known by what name?
1. A wire rope
  2. A strand
  3. A cable
  4. A core

- 4-40. In reference to a cable, what does the term "bird cage" mean?
1. A kink that has been pulled through in order to straighten a cable
  2. A cable that is manufactured to look like a bird cage
  3. A cable that is improperly stored
  4. A neatly coiled cable
- 4-41. You should examine and lubricate all lifting slings at least how often?
1. Once a week
  2. Twice a week
  3. Once a month
  4. Twice a month
- 4-42. Hoisting restrictions for a specific type of aircraft can be found in which of the following publications?
1. NAVAIR 01-1A-8
  2. NAVAIR 01-1A-17
  3. NAVAIR 15-02-500B
  4. Applicable MIM
- 4-43. What are the two types of aircraft jacks used by the Navy?
1. T-bar and camel
  2. Hand-carried and T-bar
  3. Horseshoe and outrigger
  4. Axle and airframe (tripod)
- 4-44. Aircraft jacks are serviced with what type of fluid?
1. General-purpose oil
  2. Heavy-duty machine oil
  3. Aircraft hydraulic fluid
  4. Support equipment hydraulic fluid
- 4-45. Special inspections are conducted on axle jacks at AIMD SE at what specified interval of time?
1. Every 4 weeks
  2. Every 13 weeks
  3. Every 26 weeks
  4. Every 52 weeks
- 4-46. The designation A20-lHC is for what model of jack?
1. A 10-ton, hand-carried axle jack
  2. A 20-ton, hand-carried axle jack
  3. A 10-ton, cantilever axle jack
  4. A 20-ton, horseshoe axle jack
- 4-47. What is another name for the T-bar axle jack?
1. Alligator jack
  2. Crocodile jack
  3. Toothpick jack
  4. Hard tail jack
- 4-48. A wing, nose, or tail jack is also known by what name?
1. Tripod jack
  2. Reptile jack
  3. Portable axle jack
  4. Fixed outrigger jack
- 4-49. A tripod jack consists of what total number of basic assemblies?
1. 1
  2. 2
  3. 3
  4. 12
- 4-50. A leg extension kit for a variable height tripod jack will increase its effective height by what total amount of inches?
1. 6 inches
  2. 12 inches
  3. 18 inches
  4. 24 inches
- 4-51. What manual lists alternate jacks for a given aircraft?
1. NAVAIR 01-70-19
  2. NAVAIR 19-70-46
  3. NAVAIR 19-75-40
  4. NAVAIR 70-19-48
- 4-52. NAVAIR 19-600-135-6-1 is the general preoperational inspection MRC for what types of jacks?
1. Axle jacks only
  2. Tripod jacks only
  3. Airframe jacks only
  4. All jacks
- 4-53. Which of the following statements is true regarding airframe jacks?
1. They have brakes
  2. Their wheels can be locked in place
  3. They may not be towed by using a towbar
  4. Their wheels are spring loaded on the jack

- 4-54. To prevent an airframe jack from being lowered too rapidly, what component is installed as a safeguard?
1. A safety locknut
  2. A hydraulic hand pump
  3. A safety bypass valve
  4. A hydraulic ram safety valve
- 4-55. When jacking aircraft aboard ship, you must have what minimum number of tie-down chains per jack?
1. Six
  2. Two
  3. Three
  4. Seven
- 4-56. During jacking operations, the tie-down chain preload is too high when which of the following conditions exists?
1. The jack safety valve bypasses fluid
  2. The first stage locknut does not turn
  3. The tensioning grip cannot be rotated by hand
  4. The jack baseplate is seated flush with the deck
- 4-57. As a bullet passes through the cell wall of a self-sealing fuel cell, the sealant springs together quickly and closes the hole. The aircraft may then continue its mission.
1. True
  2. False
- 4-58. The self-sealing fuel cells now in naval service are made up of what total number of primary layers of material?
1. One
  2. Two
  3. Three
  4. Four
- 4-59. What is the main advantage of a bladder-type fuel cell over a self-sealing fuel cell?
1. Fewer inspections
  2. Less total weight
  3. Thicker wall construction
  4. Slightly smaller than the aircraft cavity
- 4-60. When applying the nylon barrier of a rubber-type bladder fuel cell, you should NOT use which of the following methods of application?
1. Swab
  2. Brush
  3. Spray
  4. Roller
- 4-61. The milled skins of an integral fuel cell are normally fastened to the aircraft by what means?
1. Pins
  2. Bolts
  3. Rivets
  4. Screws
- 4-62. A fuel leak that reappears 30 minutes after it is wiped dry is classified as what category of leakage?
1. Seep
  2. Slow seep
  3. Heavy seep
  4. Running leak
- 4-63. What is the first step you should take to stop a fuel leak?
1. Reinject sealant around the perimeter of the cell
  2. Replace the O-rings under all fasteners in the leak area
  3. Retorque all fasteners 6 inches on either side of the leak area
  4. Replace the Stat-O-Seal washers under all fasteners in the leak area
- 4-64. To allow the gun piston to return before another cycle can begin, the trigger of a sealant injector gun must be released approximately how often?
1. Every 30 seconds
  2. Every 45 seconds
  3. Every 15 minutes
  4. Every 20 minutes
- 4-65. To pressure test the repair made on an integral fuel cell, you should use what gas?
1. Oxygen
  2. Dry air
  3. Nitrogen
  4. Natural gas